

VIVEK GALANI

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Career Objective

I'm looking for an embedded software developer role in C and C++. I'm ready to learn new technologies and ready to do hardware.

Skills

Programming Languages C, C++, Embedded C

Data Structure Linked List (Singly, Doubly, Circular), Tree

Microcontroller LCP2129

Protocols CAN, UART, I2C, SPI

LINUX Operating System

Internship

TEKSUN MICROSYS PVT. LTD. AHMEDABAD

23 JAN 2023 - 14 APRIL 2023

Teksun is a global Electronic R&D Services company providing services such as PCB Design, Hardware Development, Firmware Development, Technology Research, Product Engineering Services, New Product Development, Product Re-Engineering, Product Sustenance, and Manufacturing to a number of industry verticals such as Consumer Electronics, Automotive, Healthcare, Industrial, Automation, Home Automation, IOT, Security & Surveillance, Aerospace & Defence.

Professional Training

Vector India Pvt. Ltd. Professional Training in Embedded system course

February 2024 - Pursuing

- Ongoing training at Vector India Pvt. Ltd. learning programming languages such as C, C++. Also embedded software development using Embedded C programming language, also learning ARM7 based microcontroller LPC2129, communication protocols such as (SPI, I2C, CAN, UART). Additionally, I'm improving my skills in Linux operating system and programming. This comprehensive training ensures a strong understanding of embedded systems.

Projects

Firestore Home Automation

23 JAN 2023 - 14 APRIL 2023

- To demonstrate the effectiveness of this system, the devices such as LDR, temperature sensors, smoke sensors, and motion sensors have been integrated with the automation system. In addition, the GSM modules are also used for security and alert systems. The functions of the sensors are to monitor and control the light, the room temperature, and alarms. The main goal of the security system is GSM which is used to send SMS alerts to the owner. In this project, we can use Arduino Uno, Raspberry Pi, ESP 32, Control Sensors, and Relays that monitor a defined location and take action based on specified parameters like ambient light, temperature, etc.

Dashboard Implementation Using CAN Protocol

September 2024

- Designed and implemented a CAN (Controller Area Network) protocol-based project to facilitate communication between car nodes (ECU). Where one node sends control data to other node, which manages functions such as indicators, headlights, and monitors temperature and battery voltage. The received data is displayed on an LCD screen on other node, enabling real-time feedback and control. This project demonstrates my proficiency in CAN protocol.

Implement Stack Application using Templates

August 2024

– Implemented a stack application using C++ templates to create a generic stack data structure. The use of templates allows the stack to handle various data types. Implemented core stack operations such as PUSH , POP. The stack supports dynamic resizing to accommodate varying data sizes and provides error handling for underflow and overflow conditions. This project highlights my ability to apply object-oriented programming principles, my expertise in template programming, and my understanding of fundamental data structures in C++.

Pre Processor stage of compilation

May 2024

– Designed and implemented a user-defined preprocessor stage as part of the compilation process in C. This stage performs tasks such as header file inclusion which replaces #include directives with the actual contents of the specified header files, remove both single line (//) and also multi line (/* */) comments and replaces macro names with their corresponding values using #define directives. This project showcases my ability in file management and string manipulation.

Student Database Management System

February 2023

– Developed a student database management system in C using a singly linked list to efficiently manage student records. The system supports operations such as adding, modifying, and deleting student data, as well as displaying and sorting records. Implemented functionality to save the student data to a file for persistent storage. Implemented methods to count the total number of student entries and handle various edge cases. This project highlights my skills in data structures, file handling, and effective implementation of core database management operations in C.

Tools

Visual Studio Code
Keil IDE

Coding Profiles

HackerRank - https://www.hackerrank.com/profile/vivekgalani_11

Soft Skills

Management Skills	Communication Skills
Decision Making Skills	Patience
Team Work	Leadership

Education

Government Engineering College

2019 - 2024

B.E. - Electronics and Communication Engineering
CGPA - 6.77

Gujarat Secondary and Higher Secondary Education Board Gandhinagar

2019

Class XII
64.83 %

Gujarat Secondary and Higher Secondary Education Board Gandhinagar

2017

Class X
57.03 %

Extracurricular Activities

Section In-charge at National Games 2022 - Gandhinagar	2022
Managing Member at 28th Annual Conference of Indian Society of Critical Care Medicine (ISCCM)	2021

Personal Details

Date of Birth : 11th June 2002

Language : English, Hindi, Gujarati

Address : B-304, Balaji Elegance ,Swamy Vivekanandha Road, Kadugodi Tree Park,
Whitefield,Bengaluru,560066

Hobby : Playing Cricket, Chess.

Declaratyon

I do hereby confirm that the information given above is true to the best of my knowledge and I bear the responsibility for the above-mentioned particulars.

DATE :

PLACE :

VIVEK GALANI